language, giving an additional interest to the book for a reader who has already become familiar with its contents through the medium of another language. The illustrations, while of uneven merit, are almost always really illustrative, and the excellent résumés of the topics treated which accompany each chapter will prove most serviceable for the more mechanical part of the work. Finally, the carefully-selected bibliographical references on each subject, in which foreign names occur quite as often as French ones, cannot fail to give the student a touch of that broader scholarship which will not be acquired at all by the mere textbook-grinder, and only with difficulty by him whose references are limited by national boundaries. M. K. G.

Klimalehre der alten Griechen nach den Geographica Strabos. Von Dr. Hans Rid. Kaiserslautern, 1904. Small 8vo. Pp. 62.

It is significant that, with the rapid advance of modern scientific climatology, so much attention should of late have been paid to the views on climate held by the ancients. The recent works of Berger, Kiepert, Tozer, not to mention other authors, have done much to stimulate and interest in the history of ancient geography and related subjects. Among the geographers of the old days Strabo occupies a prominent place, and it is fitting that his contributions to climatology should be considered at some length in the volume before us. It may surprise those who have not some acquaintance with Strabo's writings to know that a small octavo publication of more than sixty pages could be devoted to the views held by Strabo on climate, at a time when the ideas of even the most advanced thinkers were, as a whole, extremely crude in regard to scientific matters. Dr. Rid has, however, in a sympathetic and in no uncertain way, set before us the contributions to climatology which we owe to the man who has been called "the greatest geographer of antiquity." We welcome this little volume to a place beside the latest of the present-day publications on climatology.

Strabo accepted the five-zone division probably suggested originally by Parmenides (see this BULLETIN, XXXVII, 1905, 387-388), but thought that the zone which was believed to be uninhabitable by reason of excessive heat was not as wide as the stretch from tropic to tropic, as had been supposed.

While recognizing the importance of insolation in controlling climate, Strabo appreciated the part played by temperature, by wind and by humidity. He stated the well-known fact that a movement of the air makes high temperatures easier to bear, while a calm makes low temperatures less bitter. An effect of sunshine upon the colour of the skin and in causing the hair to become crinkly Strabo thought possible only when the air is damp. The importance of monsoon winds in controlling climate, and of wind as a health-giving factor, were appreciated. One of Strabo's greatest contributions was his recognition of the control of surface features over climate, whereby *solar* climate is modified into *physical* climate, and his explicit statements regarding the importance of altitude in causing a decrease of temperature. His predecessors had in some cases suggested such a relation, but he himself first clearly discussed it. Latitude was thus shown not to be the sole cause of differences of temperature. The snow-line was spoken of, as was the difference in altitude above sea-level at which snow falls and remains on the north and south sides of mountains. Mountains were seen to affect rainfall and to act as climate barriers. The influence of local climates upon the distribution of many plants was recognized.

Among the most interesting of Strabo's views were those concerning the in-

fluences of climate upon man. He supported Hippocrates in the belief that weather changes are important in developing physical and mental well-being. He pointed out that nomads are forced to their peculiar mode of life by lack of food and by unfavourable conditions of climate. Mountain peoples are believed to be stronger than lowland peoples, because of the harsher climate in which the former live. The inhabitants of the colder northern latitudes are used to a severe climate. The dweller in the south is soft, and if he goes into a more severe climate cannot endure.

These suggestions concerning Strabo's contributions to climatology will make it plain that we owe much to this ancient writer. Dr. Rid has done well to emphasize the importance of Strabo's scientific work along these lines.

R. DEC. W.

Geografia de la Provincia de Córdoba, por Manuel E. Rio y Luis Achával, Ingenieros Civiles, Catedráticos en la Universidad Nacional de Córdoba. (*Escrita por Encargo del Excmo. Gobierno de la Provincia.*) Publicación Oficial. 2 vols. 8°, and Atlas, in folio. Buenos Aires: Compañia Sud-americana de Billetes de Banco. 1904.

Official publications emanating from the Governments of South-American Republics are, usually, very presentable books. The Argentine especially distinguishes itself, not only in the make-up of its scientific books, but also in the intrinsic value of their contents. The one before us is a fair specimen of official bookmaking in the great Republic of the Pampas and La Plata. Two portly volumes and an atlas in folio, dedicated to the geography of the Province of Córdova exclusively, are certainly well worthy of careful comment. In them, the term "Geography" is taken in its widest sense, as embracing descriptions and statistics of as good as everything connected with the territory mentioned.

The authors, two civil engineers of high standing in their country, have spared no pains in the accumulation and co-ordination of their abundant material. A respectable portion of that material appears to have been gathered (though the fact is not mentioned) by the authors themselves, and the selection made of Messrs. Rio and Achával for the task of preparing this "Geography of Córdoba" is fully justified by the result. It was no small task to do justice to the instructions received from the Executive of the Province, covering as they did, broadly and in the minutest detail, all the subjects of inquiry.

A bibliography, apparently quite complete as far as modern sources are concerned, precedes the text proper. It might, however, have been advisable to include some indications concerning older sources, especially such as are still in manuscript. While we cannot expect to find, in the writings of past centuries, many systematic data, still they often contain allusions which even modern science may advantageously consider. At any rate, where ethnography is included in the material, early history should find its place with proper references to the sources whence knowledge about earliest conditions may be derived. Among the (modern) investigators of the natural history of Córdoba, to which the report alludes, the Germans occupy perhaps the first place, in numbers and in the importance of their achievements; still, there is quite a respectable array of collaborators from the Argentine, as well as from other countries. Full reference seems to have been made to every author, and due credit given to his work.

The descriptions of the physical aspect of the Province are attractive and—what considerably enhances their value—free from the exuberance sometimes dis-